

MINUTES
CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE (CTCDC) MEETING
SAN DIEGO, MARCH 25, 2005

The first CTCDC meeting of year 2005 was held in San Diego, on March 25, 2005. Chairman John Fisher opened the meeting at 9:10 a.m. with the introduction of Committee Members and guests. Chairman Fisher thanked Caltrans District 11 for hosting the meeting. The following Members, alternates and guests were in attendance:

ATTENDANCE Members (Voting)	ORGANIZATION	TELEPHONE
John Fisher Chairman	League of CA Cities City of Los Angeles	(213) 972-8424
Farhad Mansourian Vice Chairman	CA State Association of Counties Marin County	(415) 499-6570
Gerry Meis	Caltrans	(916) 654-4551
Lenley Duncan	CHP	(916) 657-7222
Ed von Borstel	League of CA Cities City of Modesto	(209) 577-5266
Merry Banks	California State Automobile Association	(415) 241-8904
Jacob Babico	CA State Association of Counties San Bernardino County	(909) 387-8186
Hamid Bahadori	Auto Club of Southern California	(714) 885-2326
 ALTERNATES	 ORGANIZATION	 TELEPHONE
Gain Aggarwal	League of CA Cities City of Vacaville	(707) 448-5349

ATTENDEES

ORGANIZATION

TELEPHONE/E-Mail

Johnny Bhullar	Caltrans	Johnny_Bhullar@dot.ca.gov
Matt Schmitz	FHWA	matthew.schmitz@fhwa.dot.gov
Duncan Hughes	City of San Diego	drhughes@sanidiego.gov (619) 533-3757
Bahman Janka	City of Pasadena	bjanka@cityofpasadeena.net (626) 744-4610
Chad Dornsife	Highway Safety Group	cdornsife@highwaysafety.us (858) 673-1926
Richard Haggstorm	Caltrans	richard_haggstorm@dot.ca.gov (916) 654-6600
Seiko Fujikuco	LA County, DPW	sfujikur@ladpw.prg
Keith Lee	LA County, DPW	klee@ladpw.org
David Royer	University of CA	droyerpe@earthlink.net
Bob Planthold	CA Pedestrian	Political_bob@juno.com
Joe Hull	Caltrans	joe_hull@dot.ca.gov

Minutes

Adoption of December 8, 2004 CTCDC meeting minutes.

Motion: Moved by Farhad Mansourian, seconded by Ed von Borstel, to adopt the Minutes of December 8, 2004 CTCDC meeting held in Oakland. Motion carried 8-0.

Membership:

Chairman Fisher introduced Wendy Mirazo as an Alternate Member representing CHP who replaced Mark Mulgrew.

Chairman Fisher asked if any agenda items would be considered out of order. There were none. Chairman Fisher made an announcement that he brought information on Senate Bill SB 466 that would allow the use of photo radar cameras in residential areas for traffic calming. He thought that the information would be helpful for engineers who work in the traffic operations field.

Election:

Gerry Meis stated that John Fisher was elected Chairman in 2003 when Jim Larsen, Chairman CTCDC, quit the Committee because of his retirement from the County of Tulare. The by-laws of the CTCDC call for the regular appointment of the Chairman and Vice-Chairman for two calendar years, but does not address any extra time served as Chairman when the Vice Chairman serves in an acting capacity to complete an unexpired term. He suggested that John Fisher continue as a Chairman and Farhad Mansourian as Vice-Chairman to the last meeting of this year. During the last meeting of this year, an election would be held to elect a new chairman and vice chairman. Hamid Bahadori presented a motion and seconded by Ed Borstel, John Fisher as Chairman and Farhad Mansourian as Vice-Chair continue their services through this year. Motion passed 8-0.

Public Comments:

Chairman Fisher asked for public comments on any item not appearing on the agenda.

Chad Dornsife, Highway Safety Group, stated that the reason for his presence in the meeting was to address the action the Committee took in regards to "minimum yellow light change interval timing" at the December 2004 meeting. The action taken by the Committee on yellow timing will not stand in a court of law, because it is not the practice of the federal manual. He added that the CTCDC does not have authority to adopt standards in California. He added that the MUTCD standards are applicable throughout the country.

Clarification for Readers: The CTCDC is an advisory body to Caltrans. The Committee only makes recommendation to Caltrans on new traffic control devices. It is up to Caltrans whether to go along with the Committee's recommendations or reject them. The Committee is established to fulfill the requirement of California Vehicle Code Section 21400. The CVC Section 21400 is as follows:

21400. The Department of Transportation shall, after consultation with local agencies and public hearings, adopt rules and regulations prescribing uniform standards and specifications for all official traffic control devices placed pursuant to this code, including, but not limited to, stop signs, yield right-of-way signs, speed restriction signs, railroad warning approach signs, street name signs, lines and markings on the roadway, and stock crossing signs placed pursuant to Section 21364. The Department of Transportation shall, after notice and public hearing, determine and publicize the specifications for uniform types of warning signs, lights, and devices to be placed upon a highway by

any person engaged in performing work which interferes with or endangers the safe movement of traffic upon that highway. Only those signs, lights, and devices as are provided for in this section shall be placed upon a highway to warn traffic of work which is being performed on the highway.

Any control devices or markings installed upon traffic barriers on or after January 1, 1984, shall conform to the uniform standards and specifications required by this section.

Public Hearing:

02-16 Tsunami Evacuation Signing

Chairman Fisher stated that the first agenda item 02-16 was discussed during the year of 2002. It is back on the agenda and asked Gerry Meis to introduce the item.

Gerry Meis stated that there is a need to develop standards and specifications for tsunami signing for California. He would like the Committee to make recommendations to Caltrans and ask to develop standards and specs for the signs. Caltrans has adopted the federal manual along with the California Supplement. The federal manual contains signs and policies on Hurricane Evacuation, however it does not address what states should do in the case of tsunami occurrences. The Hurricane sign from the MUTCD 2003 and the sign used by Oregon and Washington have been included in the agenda packet on pages 6 through 17. Gerry introduced Jim Purpura from the National Weather Service (NWS) and asked him to address the Tsunami signing request.

Jim stated that he represents the San Diego area, however he was addressing the Committee on behalf of the NWS. He noted that there were flooding and fires in Southern California during this season and there were number of signs available to use to warn the flooding and fire hazards. The tsunami also falls in the hazard category and there is a need to develop signs for this hazard. Although it may not occur throughout our lifetime, it could occur tomorrow. Whenever it happens, there will be enormous danger to the coastal community. He added that the State of Oregon and Washington has installed tsunami signs, and those signs have also been included in the agenda packet. He added that he is not advocating which signs should be adopted in California, however consistency between neighboring states would be helpful for the traveling public. The bottom line is, if an area is subject to tsunamis, then the local authority has responsibility to inform the public that there is a hazard, and one of the tools are signs which can be used to advise the public toward safe areas. He suggested that if California adopts standard signs on tsunamis, then emergency services have a tool to implement.

Gerry agreed with Jim's Comments and added that Caltrans believes that there is an urgency to have signs for California. If the Committee made recommendations on particular signs, Caltrans will bring back to the Committee for final review and recommendations.

Chairman Fisher asked Committee members if they have any questions for Jim.

Jacob Babico stated that a few years back there was a wild fire in San Bernardino County and the Sheriff Department was responsible for developing an evacuation route. If the Committee adopts tsunami signs today, then who will be responsible for the implementation and developing evacuation routes?

Gerry Meis responded that the Committee's role is to make recommendations to Caltrans on signs, he would not be concerned who will install signs and develop an evacuation route. He would leave implementations and planning up to the locals. He believes that some of the signs used by Oregon such as "Evacuation Site" are not a traffic control device, however he would like to see input from local agency representatives.

Farhad Mansourian stated that he is involved at the local level as well as at the state level with the Office of Emergency Services to develop a plan, which would be implemented by the locals, and it would be helpful when evacuating the public in the case of an emergency. Tsunami signing was a hot topic during the meeting. There is need to have a complete package of signs to direct motorists, pedestrians and local residents where to go in the event of a tsunami hazard. There is also a need for follow-up signs. He even suggested establishing a sub-committee to review the signs used by other states and make suggestions to

the Committee on what should be adopted in California. He asked Gerry Meis what type of recommendation he is asking for from the Committee.

Gerry stated that Caltrans' role would be to develop specs and standards for the signs based on the Committee's recommendations. Since the majority of the signs would be placed on local roads, he will leave it up to the local representatives.

Farhad stated that the signs would be one of the tools to educate the public. A complete package of signs will guide the road users from the beginning to the end. He also suggested using similar signs to the other states e.g. the neighboring States, Oregon and Washington. If signs are not consistent, then it defeats the whole purpose.

Hamid asked Jim if he has information in regards to the signs used by the State of Hawaii. Are they similar to the signs used in Oregon and Washington?

Jim responded that he does not have information about the signs used by Hawaii. However, if the Committee is interested, he certainly can get that information.

Chairman Fisher stated in his opinion, people need to be educated, that in a case of Tsunami or earthquake, they should go to higher ground. The tragedy in the Indian Ocean occurred because most of the people were not aware of what to do. He is not sure if the evacuation signs will address the problem. There is a need for education. He asked Jim if there are other efforts underway to educate people beyond signing.

Jim responded that there is more to it than the signs. The NWS detects the earthquake which triggers the tsunami. There will be a warning system, the NWS will work with local communities, with beach communities and ask them how they would like to receive the warning, and what they do in the case of a tsunami. Tsunami signs are one of the tools that make up the whole effort.

Chairman Fisher asked whether the primary reason to place signs is to warn people on the beaches or the motorists on the roadway.

Jim responded to both. The tourists visit these places, the signs in the case of a tsunami hazard will inform them what they need to do. The local people will get educated over a period of time and they will find where to go in the event of a tsunami.

Hamid asked Jim if there would be a siren system to alert people, such as if a tsunami occurs at midnight when people are sleeping.

Jim responded that this would be the responsibility of local emergency services, how they would like to alert resident about the danger of a tsunami hazard or any other hazard. The NWS will alert local emergency services in the event of an earthquake or if a tsunami is anticipated. The NWS do not get involved directly with the siren system. The NWS works closely with the local emergency services.

Chairman Fisher stated that the signs included in the agenda packet does not have any references, such as what radio station to tune into to listen to weather or other warnings. Should the signs have a supplement plate with that type of information?

Farhad Mansourian stated that would be the responsibility of local jurisdictions to determine what type of system they will use to alert people. The signs are one of the pieces in this whole puzzle. There would be other educational and awareness tools to be used to alarm and evacuate people.

Ed Borstel added that the Committee's recommendations to Caltrans will initiate a process in developing the sign standards and specs, and that would be a better step. Then, everyone will be using similar signs instead of developing their own if the Committee fails to act in a timely manner.

There was a discussion on the Hurricane Evacuation sign which has been adopted in California. Some Committee members were in the opinion that there is a need for more signs compared to what is available in the MUTCD.

Chairman Fisher asked for public comments.

Jim Purpura stated that the evacuation signs with a complete package (meaning follow-up information) would be helpful to guide the pedestrians or motorists to a safe area. If a sign says flooded area, and there is no follow-up information, that it is not complete information. The signs should provide information on what action needs to be taken in hazardous cases.

Matt Schmitz, FHWA, suggested that it might be premature to adopt new signs compared to what is already given in the MUTCD. Before going outside the boundary of the MUTCD, he would like to make certain that the signs used in Oregon, Washington or Alaska are delivering the message to the users. He agreed that one sign in the MUTCD might be not enough, however he suggested that if the Committee decides to develop symbol signs then, he strongly recommends working with FHWA so the signs can be incorporated in the MUTCD.

Hamid asked Mat of the three states, Oregon, Washington and Alaska using tsunami signs, California is the only state left on the West Coast who has not installed tsunami signs. Do you know if FHWA has acknowledged that there is a need to improve MUTCD signing in regards to tsunami hazards?

Matt responded that he is not aware whether the MUTCD folks are working on this matter. He further added that if California believes that there is a need for more than what is already in the MUTCD, then work with the MUTCD group so this could be incorporated to the MUTCD.

Dave Royer, consultant, stated that he traveled through the east and there are signs on all roadways informing motorists what to do in the event of a Hurricane. He believes the information was very useful, especially for the travelling public.

Chad Dornsife stated that all new traffic control devices go through the MUTCD process. If you develop a traffic control device in California, you can submit simultaneously to FHWA for experimentation. The Atlantic Ocean is also subject to tsunamis, therefore the sign used in western states should be used in eastern states. People will see the same signs when they travel from one place to another. The MUTCD is a uniform application regardless of the state.

Gerry Meis stated that Nancy Dean from the NWS has promised to work with the FHWA and with the MUTCD group.

Chairman Fisher asked Jim if there are other efforts on going to identify the areas which could be effected by tsunami.

Jim responded that the NWS is not involved directly in that process, however, there is a map developed indicating the effected areas and he is not sure if that is in a final format. He will be able to get that information.

Gerry Meis added that he has been informed that US Geological Survey (USGS) is developing a map which would have information of the effected areas.

Chairman Fisher asked who would adopt that map.

Gerry Meis sated that in his opinion, Office of Emergency Services (Governor's office) would be the appropriate Office to adopt that amp.

Chairman Fisher asked for any other comments from the public and Committee members. There were none.

Motion: Moved by Farhad Mansourian, seconded by Hamid Bahadori, recommended that Caltrans develop signs, Tsunami Hazard Zone and what to do, Tsunami Evacuation Site, Entering Tsunami Hazard Zone, and Leaving Tsunami Hazard zone, by using the existing signs from the MUTCD or by using the sign uses by other states such as Oregon and Washington, or by developing new ones if they think that is the best way to go.

Chairman Fisher commented that he agreed with the Evacuation Route sign, however, without knowing the Evacuation Sites, what is the use of adopting signs.

Farhad responded that to determine the evacuation site is the responsibility of the local agency. The map which will be prepared by USGS, would be helpful to identify the Tsunami Hazard Zones. However, the rest is up to local agencies to develop a plan and implement them, where signs would be a part of that process.

Merry Banks commented that it is good to have a complete set of signs and requested that Caltrans bring those sign to the next meeting so the Committee members know what they are voting for.

Gerry Meis stated that Caltrans would develop the sign specifications, policies and will bring back to the next meeting for Committee's recommendations.

Motion carried 7-1 (Gerry Meis abstained).

04-13 Older California Traffic safety Task Force proposal to Amend MUTCD Section 4E.10

Chairman Fisher asked Gerry Meis to introduce agenda item 04-13.

Gerry stated that this item was discussed during the last meeting and two sub items of this item were recommended by the Committee for adoption and the third sub item was deferred for more information. Gerry invited Johnny Bhullar, member of the task force and asked him to address the Committee on this item.

Johnny stated that during the last meeting the Committee requested studies which have suggested 2.8 fps walking speed to be considered if an intersection is used by older pedestrians. Those reports were sent out separately as a part of the agenda as a separate attachment. In addition to that, the proposal also has been amended as per the discussion during the last meeting and text in *italic* was revised based on the discussion as follows:

Proposed CA Supplement Section 4E.10 text (Add proposed text in addition to the above MUTCD text):

Guidance:

Where older pedestrians routinely use the crosswalk, a walking speed of 0.85-m (2.8 ft) per second should be considered in determining the pedestrian clearance time, *unless an engineering study justifies a different walking speed.*

Johnny added that the existing guidelines under this Section will stay as it is and the proposal will be added to the current guidelines. Johnny introduced Richard Haggstorm, Caltrans, who is responsible for putting together the background material.

Richard Haggstrom stated that during the last meeting the Committee requested studies, which supports the 2.8-fps walking speed for the older pedestrians. He added that he was able to track down the Los Angeles study which was conducted by UCLA in 1994 and was provided as a separate attachment when the agenda was mailed to the Committee members and others. The other study conducted in Australia was received latter and due to a copyright, it was not mailed out. However, there were a few copies on the handout table for review. In addition to these two studies, there are three more studies available for review. Richard added that a study prepared by ITE in Florida was also included in the handout that was placed on the table. The AASHTO green book recommends .9 meters walking speed for the older pedestrian. Richard asked Committee members if there were any questions for him.

Hamid Bahadori asked if these studies or the proposal were discussed with the Caltrans Traffic Signal Operations Committee (CTSOC).

Richard responded no.

Hamid noted that the CSC recommended not adopting the proposals.

Gerry Meis added that the TSOC are in disagreement with the proposal, however he would like to get input from counties and cities.

Johnny added that this agenda item and others which were brought to the Committee by the older California Traffic Safety Task Force are from the FHWA publication. The majority of the recommendation has been incorporated in the MUTCD 2003 and on the remaining, FHWA is working to

incorporate. California wants to take a proactive approach and adopt the remaining recommendations from the FHWA guidelines.

Farhad Mansourian noted that the current language of the MUTCD 2003 makes reference to wheelchair pedestrians, and that the proposed language has only reference to the older pedestrian. He wondered if reference to a wheelchair pedestrian was intentionally eliminated?

Johnny responded yes, because the studies only mention older pedestrians.

Jacob noted that the study also reflects that by using a lower pedestrian walking speed, would that have adverse impact on the operation of an intersection?

Johnny responded that is correct, however, the safety was considered a priority over the operation.

Hamid stated that by adopting the proposal, engineers might try to find a way out and not use less than 4 fps, because to justify any other number from 4 fps or 2.8 fps requires an engineering study. It will also be difficult to defend any other number because then your study would be contradicting other studies that support the use of 2.8 fps.

Chairman Fisher stated that the 2.8-fps walking speed is the 15 percentile of all the older pedestrians. He added that the City of LA, very actively looks into walking speed and adjusts the traffic signal timing to accommodate pedestrian needs. Their study found an average speed of 3.4 to 3.5 fps for the pedestrians, and he is not sure about the validity of 2.8 fps.

Richard Haggstorm responded that 2.6 fps is the average walking speed of older pedestrians.

Farhad Mansourian stated that the current MUTCD 2003 language does allow going less than 4 fps, so if the practitioner has knowledge of an intersection used by older pedestrians and an adjustment is needed for the pedestrian phase, he asked why is that not acceptable.

Johnny responded that the proposed language would prohibit local agencies to pick an arbitrary number, unless its justified based on affects. If a practitioner goes less than 4 fps, then he needs to use 2.8 fps unless a different number is justified based on an engineering study.

Chairman Fisher stated that the best place to add this language would be under the “support” section and that would provide information to engineers while they considering accommodating older pedestrians at the signalized intersections.

Gerry Meis suggested changing the word “engineering study” to “engineering review”.

Johnny responded that the MUTCD use only two references, either engineering study or engineering judgement.

Farhad Mansourian suggested that the following language be considered as an alternative to the proposed language:

Where pedestrians who walk slower than 1.2 m (4 ft) per second, or pedestrians who use wheelchairs, routinely use the crosswalk, under that conditions a walking speed 2.8 fps is recommended unless engineering judgement suggest different walking speed be used.

Chairman Fisher stated that this is a “should” condition and it will be under guidance. He further suggested the best use of this information would be if it placed under “support.”

Jacob Babico stated that since the MUTCD team is considering these recommendations to include in the MUTCD, why not defer this item and wait for FHWA's decision.

Chairman Fisher stated that Jacob raised a good point and he further added that he sits on the national committee and the national committee at this time is considering using a lower default value to the 4-fps. The committee could wait until the MUTCD get revised and include the proposal under “support or option.”

Johnny added that the MUTCD has included some of the recommendations and they are considering the remaining recommendations. California does not want to wait for the MUTCD changes, and these proposals are from the federal guidelines published by the FHWA.

Chairman Fisher opened the discussion to the public.

Bob Planthold, Member of the California Pedestrian Committee, which is represented by the CHP, Caltrans, Office of Traffic Safety, FHWA, Health Department and Pedestrian Mobility Group. He added that he supports the 2.8-fps walking speed to be included as guidance in the California Supplement. He agreed with Farhad Mansourian's previous compromising wording. There is talk in the traffic engineering community that by reducing pedestrian walk speed, it will compromise the operation of the intersection. The pedestrians are also a part of the traffic. If a pedestrian gets hit in a crosswalk, traffic will slow down. In some instances, the road would be closed and emergency vehicles will slow down the traffic. The proposed language will provide enough time for pedestrians to cross a roadway and that will reduce accidents. Traffic accidents also have direct impact on the State's economy. Greater injury and longer rehab will increase health insurance cost if you are insured, but it will spend public funds if someone is not insured. If you adopt this proposal, it may slow down traffic, however it will reduce the number of accidents. The accidents can drain public funds. If you lower the walking speed to 2.8 fps that will provide enough time for pedestrians to cross a roadway. They do not have to run or rush, when they have confidence, they are not going to stumble. Bob stated that people are living a longer life and they are living in senior citizen centers, nursing homes and they use nearby facilities. There is another factor to use, when an older pedestrian travels from one town to another town in California, he or she would face the same type of treatment at all the crossings. He requested the committee to adopt proposed language and not to wait for the MUTCD revision. California wants to be proactive to the needs of older and disabled pedestrians.

Chad Dornsife stated that the proposal contains a statement in regards to the engineering study, it means that study shall be documented. If using the term “engineering judgement”, that requires less documentation and as long as the engineer uses intelligent judgement, federal law protects the public agency against any litigation.

Chairman Fisher asked for any other comments from the public. There were none.

Chairman Fisher again opened discussion amongst Committee members.

Hamid Bahadori added that the main purpose is to improve pedestrian safety. The proposed language will defeat the purpose, because it will limit public agencies to use 2.8 fps where older pedestrians use the facility unless an engineering study is conducted. Any documentation prepared to justify different walking speeds to the 2.8-fps could be challenged in court. Because the 2.8-fps is recommended by

numerous studies, the proposal will put limitation at the intersection where different walking speeds can be justified.

Farhad Mansourian stated that he agreed with Hamid, however there are two types of jurisdictions. One, who has resources to conduct study and determine the reasonable walking speed, others, which does not have resources, will prefer a number to use. Farhad further stated that he present a motion as follows:

Guidance:

Where older pedestrians and disabled pedestrians routinely use the crosswalk, a walking speed of 0.85 m (2.8 ft) per second to be considered in determining the pedestrian clearance time, unless an engineering judgement justifies a different walking speed.

Merry Banks seconded the motion.

Chairman Fisher stated that the current guidance already tells you that less than 4 fps can be used. In his opinion, if the Committee wants to provide information to the engineering community, this information can be included under “support”.

Farhad asked Johnny Bhullar, how you make this proposal as an “option”.

Johnny commented to move under “support” and change the wording from “engineering study” to “engineering judgement”.

Chairman Fisher stated that the “support” provides information, and if there is a language which talks about judgement or consideration that will be a “guidance”.

Johnny Bhullar asked Matt Schmitz, FHWA, if he would like to provide input on the content of “support” section.

Matt agreed with Chairman Fisher’s comment that the purpose of the “support” section is to provide information to users. This is something new in California and he encourages the use of this as much as possible and let the practitioner find the information by using different resources.

Bob Planthold added that the proposed guidance would be more beneficial in reducing pedestrian related accidents.

Bahman Janka, City of Pasadena, stated that the he supports Farhad Mansourian’s proposal if the Committee uses a “may” condition instead of a “should” condition.

Johnny Bhullar shared comments made by the CTSOC on the words “routinely” and “older” used in the proposed language. They asked how to define routinely and older.

Jacob Babico stated that the proposal is, if the intersection is used by older pedestrians, use a walking speed of 2.8 fps, otherwise 4 fps is a standard walking speed. Any other walking speed requires study and justification. He suggested using as low as 2.8 fps if older pedestrians use the intersection.

Lenley Duncan stated that he does not agreed with using a term downward to 2.8 fps. This will not allow use of less than 2.8 fps.

Farhad stated that he is willing to modify the motion if it takes care of Hamid’s concern.

Motion: Moved by Farhad Mansourian, seconded by Merry Banks, recommends Caltrans to adopt the following language to Section 4E.10 under “option”:

Option:

Where older or disabled pedestrians routinely use the crosswalk, a walking speed of 0.85-m (2.8 ft) per second may be used in determining the pedestrian clearance time.

Motion carried 7-1 (Jacob Babico abstained)

04-15 Older California Traffic Safety Task Force Proposal to Amend MUTCD Sections 2B.33, 2B.34, 2B.35, 2B.37, 2B.38 4D.10 and 4E.10

Chairman Fisher asked Johnny Bhullar to address the agenda item 04-15.

Johnny stated that basically there are three sub items under this item and the first item is related to the offset of left-turn lanes geometry, signing and delineations. Concerns have been raised that the potential for wrong-way maneuvers when offset left-turn lanes are used may justify the need to add appropriate signs and markings to eliminate such behaviors. When the left-turns are channelized between the through traffic and the further they are slightly offset there is a possibility for sight-distance restrictions for older drivers. In this scenario, a panel of older drivers and highway design experts recommended the use of oversized signs. The recommendation to be included under guidance is as follows:

Guidance:

At intersections where the left-turn lane treatment results in channelized offset left-turn lanes e.g., a parallel or tapered left-turn lane between two medians, the size of the Keep Right (R4-7), DO NOT ENTER (R5-1), WRONG WAY (R5-1a), ONE WAY (R6-1, R6-2), or Divided Highway Crossing (R6-3, R6-3a) signs, if used, should be oversized (larger than Table 2B-1 specified standard sizes for conventional roadways) to reduce the potential for wrong-way maneuvers by drivers turning left from a stop-controlled, intersecting minor roadway.

Gerry Meis inquired if the proposal is from the FHWA publication.

Johnny responded yes. He further added that all the items brought to the Committee by the Older CA Traffic Safety Task Force are from the FHWA publication.

Hamid Bahadori commented that in some cases, the median is narrowed to two feet as it approaches to the intersection. In that case, the larger sign will overhang in the travel way, would that be a problem? Hamid added that the proposal should address narrow median intersections.

Johnny responded that it is a correct statement and it may be that the proposal needs to be reworded to address narrow medians.

Gerry Meis commented that the proposal might need to be revised from “guidance” to “option”.

Farhad Mansourian stated that the proposed language could be changed by saying, “if used and the geometric of the intersection are feasible to accommodate larger signs”.

Chairman Fisher noted that the use of this type of sign has been terminated. The proposed language says “if used”, the signs should be oversized. On the other hand, their use was eliminated from this type of intersection. He further asked whether there was any study to support that the older drivers cannot readily see a 24x30 standard one way sign.

Johnny responded that there is a reference in the agenda packet about two studies conducted in 1995 and 1997 and if members want to view the studies it can be provided.

Chairman Fisher stated that the studies talk about the wrong way maneuvers and does not say whether the signs were not visible.

Hamid added that if this type of intersection is problematic, why not then makes these signs mandatory.

Chairman Fisher suggested that if a broken yellow stripe line (left side swing line) from the side street is extended to the right side of the median, that should solve the wrong-way problem and this tool is available.

Johnny stated that option is available and it was adopted in California during the MUTCD adoption process.

Chairman Fisher stated when FHWA guidelines recommended the use of oversized signs, at that time the cat track striping option may have been overlooked.

Jacob Babico added that the signs at the median nose could be eliminated and that would address the issue of overhanging of the oversized signs in the travel way at the narrow medians which was raised by Hamid.

Chairman Fisher suggested that the “guidance” is changed to an “option” and the language could be modified as follows:

Option:

At intersections where the left-turn lane treatment results in channelized offset left-turn lanes e.g., a parallel or tapered left-turn lane between two medians, the size of the Keep Right (R4-7), DO NOT ENTER (R5-1), WRONG WAY (R5-1a), ONE WAY (R6-1, R6-2), or Divided Highway Crossing (R6-3, R6-3a) signs, a larger size sign (larger than Table 2B-1 specified standard sizes for conventional roadways) or intersection delineation from the side street to the right side of the island may be used to reduce the potential for wrong-way maneuvers by drivers turning left from a stop-controlled, intersecting minor roadway.

Chairman Fisher added that this would provide an extra tool to the practitioners to use.

Johnny responded that would be an acceptable alternative, because the language will provide an extra tool to practitioners to address a problem, if one exist.

Chairman Fisher asked for public comments.

Dave Royer suggested that if this option is accepted, this should be implemented at all with a median of 30 feet or less. He added that these signs were recommended to install when the median is wider than 30 feet. He added that the striping treatment is a very useful tool.

Chad Dornsife talks about using a combination of red, yellow and white illuminated LED markers to warn wrong-way movements.

Gerry Meis stated that his observation after listening to the comments is that city and county representatives do not believe there is a problem.

Chairman Fisher stated that there are a number of tools available to address this type of situation, such as by improving delineation, or painting the nose of the island. Chairman Fisher asked if there was a motion on the floor. There was none.

Committee members agreed that the extension of the left swing line would solve the problem and that option is available in the manual.

Action: There was no motion on the floor and the Committee took no action on the item.

Chairman Fisher asked Johnny Bhullar to address the next sub item "all red clearance".

Johnny stated that the title of item is labeled "yellow change and red clearance intervals, however the proposal is only about the red clearance. Johnny added that red clearance interval is not a mandatory requirement, the proposal is, if an agency choose to provide red clearance at a signalized intersection, then it should be consistent. The Older California Traffic Safety Task Force is proposing to use the formula recommended by the Institute of Transportation Engineers (ITE) for the calculation of all red clearance phase. The proposal is as follows:

Guidance:

To accommodate age differences in perception-reaction time, an all-red clearance interval should be consistently implemented, with length determined according to the Institute of Transportation Engineers (1992) expressions given below:

a) Where pedestrian traffic is prohibited, or no pedestrian crossing facilities are provided, use:

$$r = (W + L)/V$$

b) Where pedestrian crossing facilities are provided, use:

$$r = (P + L)/V$$

Where: r = length of red clearance interval, to the nearest 0.1 s.

W = width of intersection (m [ft]), measured from the nearside stop line to the far edge of the conflicting traffic lane along the actual vehicle path.

P = width of intersection (m [ft]), measured from the near-side stop line to the far side of the farthest conflicting pedestrian crosswalk along the actual vehicle path.

L = length of vehicle (recommended as 6 m [20 ft]).

V = speed of the vehicle through the intersection (m/s [ft/s]).

Johnny also shared the comments made by the CTSOC. The CTSOC does not agree with the proposal and they want to leave the red clearance phase up to the engineer's discretion.

Chairman Fisher asked for comments from the Committee members.

Hamid Bahadori stated that CSC opposes this recommendation. He also noted that the formula considers a vehicle speed through the intersection and it will create a controversy as the Committee is still learning about the yellow timing.

Jacob Babico also raised same concern as Hamid.

Chairman Fisher noted that there might be a difference on the agreement on all red clearance intervals, however it would be helpful to clear the traffic through the intersection. The yellow timing is set for traffic to clear through the intersection, if a motorist not able to stop. The traffic entered legally to the intersection may need an extra 2-3 seconds to safely cross the intersection which could be provided by the all red clearance interval.

Chairman fisher asked for public comments.

Dave Royer stated that the ITE formula has some flaws. It does not consider the start time of a vehicle or pedestrians. The start time should be subtracted from this formula. Secondly, the average vehicle length

is 15 feet, while ITE formula considers 20 feet. A different study shows that the average start time for pedestrians is around 3 seconds. The start time for a vehicle can also be found in different studies. When you subtract a start time from the ITE formula, at some locations the all red clearance interval may be calculated to zero. He recommended not adopting the ITE formula unless it considers all the factors such as including the subtraction of start time.

Gerry Meis asked, are you against the adoption of the ITE formula?

Dave said yes, because it needed clarification about the start timing of a vehicle or a pedestrian.

Hamid commented that the vehicle speed is one of the factors, how and where a speed is taken would be a controversial issue.

Dave stated that he would use the 85th percentile.

Hamid added that vehicle speed has already created a controversy on the determination of the minimum yellow timing. The location where the speed survey was taken in reference to the intersection will be challenged all the time.

Chairman Fisher added that in this case if an agency uses posted speed limit it would give more red clearance time versus the 85th percentile or a higher speed. John asked Dave, if the formula considers a start up time, would you be supportive for the adoption of the ITE formula.

Dave said yes and he will offer some parameters to the engineers about the start up time.

Chad Dornsife stated that the ITE formula was never verified. He will leave all red clearance intervals up to the engineers. Because each location has different types of traffic, such as a city road may have a lot of buses or other types of slow traffic which need more red clearance time versus a rural county road that may have high speed and require less red clearance time. He suggested to leave it up to the engineer's judgement based on field conditions. The red clearance is a safety-related improvement.

Gian Aggarwal, alternate member, stated that a recent study published by Texas indicates that the all red clearance phase can eliminate the use of red light cameras. By allowing one (1) second of all red clearance phase, would allow 85% of traffic to clear the intersection, when two (2) seconds of all red phase would allow 100% of traffic to clear the intersection. The study further indicated that the use of all red clearance phase would eliminate the use of red light cameras.

Chairman Fisher asked for any other comments from the public. There were none.

Chairman Fisher opened discussion among Committee members.

Chairman Fisher added that the MUTCD offer very general guidance on the all red clearance phase. The traffic control devices handbook has two formulas. One, which is included in the agenda packet and the other one does subtract one (1) second from the start time. He stated that if the Committee does not believe to adopt it, then it may be appropriate to include under the "support" section. If engineers would like to use it they have the resource available. He believes that there is need to apply the all red clearance phase at all intersections which would allow the clearance of traffic before opposing traffic receives a green signal.

Hamid Bahadori stated he agreed with Chairman Fisher's comments, however he believes that the Committee is not ready to recommend something that is already a controversial topic. Without reviewing the formulas from the traffic control devices handbook, it is premature to make a decision.

Gerry Meis suggested that the California Older Traffic Safety Task Force should revisit this proposal because he believes that there were some concerns on the proposal the way it has been submitted.

Farhad Mansourian added that sending back the proposal to the task force without any specific suggestions would not be a wise approach. He suggested that the MUTCD and California Supplement does allow the use of the all red clearance phase. He suggested to take no action and at the same time do not send back the proposal to the task force for more clarification.

Chairman Fisher asked whether today's agencies are applying the all red clearance phase consistently. The MUTCD language is very general, which says, "the all red clearance should not be more than six (6) seconds."

Hamid asked if there is a need for standards? The current language leaves it up to the agencies to determine if there is a need or not for the red clearance phase. He further added that there were comments earlier about the validity of the formula.

Chairman Fisher asked if there was a motion on the floor. There was none. He added that the formula needs some clarification about the start timing which is not included. He recommended since there is no motion, the Committee is not taking any action.

Action: The Committee took no action on the item.

Chairman Fisher asked Johnny Bhullar to address the third sub item of the agenda item 04-15 "Pedestrian Intervals and Signal Phases".

Johnny stated that this is a new application and proposal is as Follows:

Proposed text to be added to Section 4E.10 of CA Supplement:

Guidance:

At intersections with high pedestrian volumes, high turning-vehicle volumes, and no turn on red (NTOR) control for traffic moving parallel to a marked crosswalk, a leading pedestrian interval (LPI), timed to allow slower walkers to cross at least one moving lane of traffic should be used to reduce conflicts between pedestrians and turning vehicles. The length of the LPI, which should be at least 3 seconds, should be calculated using the formula:

$$\text{LPI} = (\text{ML} + \text{PL}) / 2.8$$

Where: LPI = seconds between onset of the WALK signal for Pedestrians and the green indicator for vehicles.

ML = width of moving lane in ft.

PL = width of parking lane (if any) in ft.

2.8 = walking speed in ft/s.

Johnny added that this proposal does include the 2.8-fps walking speed as was discussed under item 04-13 and the Committee has recommended adopting it as an "option". The purpose of this recommendation is to allow pedestrians to cross the first lane or parking lane before the parallel traffic receives a green

phase. This will basically reduce the conflict between the right turn traffic and pedestrians. This formula is not in the ITE handbook.

Chairman Fisher opened a discussion among Committee members.

Farhad Mansourian stated that it seems the proposal is so specific that the traffic engineers want to address a specific problem.

Johnny stated that these recommendations are based on the studies and the reference has been included in the agenda packet. However, CSC opposes this proposal too. They do not want any restriction, they would like to keep the flexibility so engineers can make recommendations based on field observations.

Hamid Bahodri stated that the proposal contains the words "high turning-vehicle volumes, and high pedestrian volumes". How will a practitioner define high volumes? It would be difficult to interpret high volumes.

Johnny stated that CSC also raised a concern regarding the high volume. The proposed language is from the FHWA publication and the task force does not want to wait until the FHWA includes it into the MUTCD. The task force wants to be proactive and adopt this recommendation in California.

Jacob Babico stated that all these items are related to the traffic signal operations and timings. In his opinion, these proposals have a direct impact on the operation of an intersection. These three items are in addition to the minimum yellow light change interval, which the Committee has adopted during December 2004 meeting.

Chairman Fisher suggested that these are good tools and make available to practitioners, their proper reference might be in the traffic control devices handbook. The way the proposal is presented, it becomes very prescriptive when you add as guidance. He suggested not taking any action on this item.

Motion: Moved by John Fisher, seconded by Farhad Mansourian, recommended that no action be taken on this item.

Motion carried 8-0

Farhad Mansourian suggested to Johnny Bhullar that he consult with the Older California Traffic Safety Task Force and bring only those items that have good merits and have support from Caltrans. Too many items on the agenda will lose the interest of the Committee.

Experimentation Items:

**04-6 Proposed School Bus Sign, “Do not Pass Stopped School Bus Flashing Red Lights”
Increased Fines Apply CVC 22454.5**

Chairman Fisher asked Jacob Babico to address agenda item 04-6, proposed School Bus Sign, “Do not Pass Stopped School Bus Flashing Red Lights” Increased Fines Apply CVC 22454.5.

Jacob Babico stated that there is a no representative from the County of Ventura to present this item to the Committee, therefore he requested the item to be deferred for a future meeting. He further added that during the August 2004 meeting, the Committee asked the County of Ventura to seek other alternatives to educate the public about the law and their responsibilities. If a problem still existed, then the issued could be brought back to the Committee for discussion. The County has stated that they have not sought out other avenues to solve this problem.

Action: Item was deferred for a future meeting. It will be placed on the agenda if the County of Ventura request to do so.

05-1 Experiment with a Pedestrian Enhanced Delineation System by using in-roadway warning lights for Crosswalks at the Signalized Intersection.

Chairman Fisher asked Hamid Bahadori to introduce agenda item 05-1, experiment with pedestrian delineation system by using in-roadway warning light for crosswalks at the signalized intersection.

Hamid introduced Bahman Janka, Transportation Administrator, City of Pasadena, and asked him to address the experiment request submitted by the City.

Bahman Janka stated that they had a small PowerPoint presentation they would like to share with the Committee. Bahman also thanked the Committee's approval for the experiment with the "flashing yellow arrow" for the left turn movement and stated that the concept has been receiving positive comments. The City will submit the final data to the Committee.

Bahman stated that the City of Pasadena is requesting approval from the California Traffic Control Devices Committee (CTCDC) to conduct an experiment with a Pedestrian Enhanced Delineation System (PEDS) for crosswalks at the signalized intersection of Arroyo Parkway and Fillmore Street. The City is currently involved in the design development of the City's Arroyo Parkway Streetscape Enhancement Project, which is a main gateway entry to the City from Highway 101. The goal of the project is to improve mobility, enhance the streetscape of Arroyo Parkway, and enhance the delineation of the pedestrian crosswalk lines through the application of technology to increase pedestrian compliance and increase the visibility of the crosswalks to pedestrians. The intersection of Arroyo Parkway and Fillmore Street is located midway along the City's project and is controlled with a traffic signal and pedestrian crosswalks. The Gold Line Light Rail Transit (LRT) Fillmore Station is located on the west side of the street and the crosswalks are used by pedestrians from the area's residential land uses on the east side of the street to access the light rail station for trips to Los Angeles or other areas.

Bahman added that the Gold Line LRT started operation in Pasadena in July 2003. The intersection of Arroyo Parkway and Fillmore Street was signalized to provide a safe crossing for pedestrians using the intersection to access the LRT station. The traffic signal provides adequate safety features for pedestrians, the City's goal is to provide additional enhancements to the crosswalks to promote the use of the crosswalks, increase the visibility of the crosswalk lines to pedestrians especially during nighttime hours, and increase the pedestrians' compliance with the pedestrian signal indications.

Bahman stated that the 2003 Manual on Uniform Traffic Control Devices (MUTCD) Chapter 4L provides Support, Standard and Guidance for the application of "In-Roadway Lights." While this chapter references the applicability of these devices to warn "road users", the intent of the chapter appears to focus on warning "motorists" using the roadway. This chapter does not specifically address how and if the "In-Roadway Lights" may be used to warn "pedestrians" of specific conditions. He added that the MUTCD does not allow the use of in-roadway light with signals, stop sign or with yield sign. However, the proposal is not conflict with MUTCD standards, because it will enhance the pedestrian delineations and motorists will not see in-pavement lights.

Bahman showed the slides which illustrate the location and concept for the in pavement lights at the subject intersection. This experiment will be focused on "enhancing pedestrian markings" and the in-pavement lights will be installed in such a way that they only be directed along the crosswalk lines toward pedestrians. The in-pavement lights will be synchronized with the pedestrian signals, and will be operated in the following fashion:

During the pedestrian **WALK** interval, the in pavement lights will be turned on to **SOLID WHITE**

During the pedestrian **FLASHING DON'T WALK** interval, the in-pavement lights will be turned on to **FLASHING YELLOW**

During the pedestrian **DON'T WALK** interval, two options may be available:

- a) The in pavement lights will be turned on to **SOLID YELLOW**; or
- b) The in pavement lights will be turned **OFF** or remain **DARK**, until the next possible pedestrian actuation.

Bahman stated that one concern having a solid yellow would be that the motorist will be seeing a green signal and at the same time, solid yellow in-pavement lights which might create confusion. Basically, when the "solid Hand" appears for pedestrians, the in-pavement lights will be turned-off completely. When a pedestrian gets the "walk" phase (walking man), the light will be solid white and when a "flashing don't walk" appears on the signal, the in-pavement light will be in a flashing yellow mode (and can be in orange red color, consistent with the flashing don't walk).

Bahman asked for the Committee's approval for a 3-year-period to conduct this experiment. The project may be terminated according to the CTCDC's "Guidelines for Experimentation with Traffic Control Devices." The City of Pasadena will conduct a "before and after" study to measure the effectiveness of the proposed experiment. The studies will include pedestrian counts, pedestrian compliance during the WALK and FLASHING DON'T WALK intervals, pedestrian violations during the DON'T WALK interval, as well as the motorists' compliance or violation of pedestrians' right of way during the WALK and FLASHING DON'T WALK intervals. The studies will also include an overall qualitative statement about the effectiveness of the proposed Pedestrian Enhanced Delineation System. The City of Pasadena will provide the CTCDC with periodic status reports on the experimentation in accordance with the Committee's "Guidelines for Experimentation with Traffic Control Devices." Bahman stated that the City of Pasadena would be responsible for administering this experiment under his supervision. Bahman asked if the Committee had any questions for him.

Marry Banks asked whether the City had considered pedestrian countdown signal heads (PCSH), which is an approved traffic control device to use in California.

Bahman responded that he agreed that the PCSH is an effective device, however the proposal is to enhance pedestrian delineation.

Gerry Meis asked whether the proposal addresses a specific problem.

Bahman replied that there was no safety problem, simply the proposal is use with different technology to enhance existing pedestrian delineation.

Jacob Babico asked whether opposing traffic stopped for the pedestrian phase would see the in-pavement lights.

Bahman responded that the traffic parallel to the pedestrian phase will see the lights, however the traffic stopped at the red signal would not see the lights. The traffic that sees the in-pavement lights would be seeing similar devices such as those at the pedestrian signals.

Chairman Fisher asked if the purpose of the in-pavement lights is to make the x-walk brighter to provide better right-of-way to pedestrians. He further asked how to address the issue of the MUTCD in regards to

flashing yellow in-roadway warning lights (IRWL) that are to warn the motorists, but not to the pedestrians.

Bahman responded that the traffic stopped for the pedestrian phase would not see the in-pavement light and he does not believe it would be a conflict with the MUTCD guidelines. This might be a tool to educate pedestrians when to step into the x-walk.

Lenley Duncan asked about the color of the in-pavement light in a flashing and steady mode and if this will cause confusion to the motorists.

Bahman responded that the lights will be solid white during the pedestrian walk (walking white man symbol) phase and will flash in yellow color during the pedestrian don't walk phase. The color of the in-pavement lights will be consistent with the pedestrian walk messages.

Hamid Bahadori inquired about the methodology of the data collection.

Bahman responded that the study will include pedestrian counts, pedestrian compliance during the WALK and FLASHING DON'T WALK intervals, pedestrian violations during the DON'T WALK interval, as well as the motorists' compliance or violation of pedestrians' right of way during the WALK and FLASHING DON'T WALK intervals. The studies will also include an overall qualitative statement about the effectiveness of the proposed Pedestrian Enhanced Delineation System.

Chairman Fisher stated that the current standards have a walking man symbol, pedestrian countdown signal heads, and they are effective tools. Fisher does not believe this proposal fulfills a need and that it may create problems.

Bahman responded that it might solve problems such as compliance to the pedestrian signals. There is no safety problem at the location, however, the City is proposing to enhance the pedestrian delineation.

Gerry Meis stated that even though it is claimed that the stopped traffic would not see the in-pavement lights, in his opinion the stopped traffic would be able to see the lights which are on the sides and that it is not consistent with MUTCD standards. He suggested contacting FHWA to seek approval for the experiment.

Farhad Mansourian stated that in-roadway warning lights have been approved for use on public roadways.

Bahman responded that the MUTCD says, "in-roadway warning lights" shall not be used at signals, stop or yield signs.

Hamid Bahadori stated that even though there is no safety problem, the proposal is an aesthetic improvement to make the City entry more appealing to the visitors. In his opinion, it does not create confusion, nor does it create conflict with the manual. As long as it does not create any problems, the City should be authorized to conduct the experiment.

Chairman Fisher stated that the motorists are used to see IRWLs at crosswalks and they understand they need to yield to pedestrians. When they see lights in the proposed configuration, where they do not have to yield for pedestrians, this could give a mixed message when they are supposed to yield.

Bahman responded that the proposed system will be consistent to the current pedestrian signal indications, and he does not believe this will confuse motorists at the locations where IRWL are installed for warning purposes.

Chairman Fisher stated that since the MUTCD says, “IRWLs shall not be used at signalized intersections”, in his opinion federal approval is required.

Chairman Fisher asked Matt Schmitz of FHWA to comments on this item.

Matt stated that the MUTCD is clear that IRWLs shall not be used at “stop, yield or signalized” intersections. In his opinion, traffic may not be able to see the in-pavement lights in front of them. However, traffic would be able to see the in-pavement lights on the sides of the traffic. In addition, at nighttime the traffic from all approaches would be able to see blinking lights.

Bahman stated that the City would approach to the FHWA and ask for experimental approval.

Chairman Fisher and other Committee members agreed for the City to approach to the FHWA for approval.

Action: The Committee took no action on the item, however suggested that the City of Pasadena to approach FHWA for approval on experimenting with in-roadway LED pedestrian delineators.

04-11 Bicycle May Use Full Lane

The City of Santa Cruz has requested to remove their experiment request with “Bicycle May Use Full Lane” from the CTCDC agenda.

The Committee recommended to the Committee Secretary to remove item 04-11, bicycle may use full lane from the future CTCDC agendas.

**Pedestrian Countdown Signal Heads, Recommendation to Close Items 01-3, 01-7, 02-2, and 02-4
Pending Under Experimentation**

Gerry Meis stated that the pedestrian countdown signal heads is an approved traffic control device in California as well as approved by the FHWA. In California, a number of local agencies had installed PCSH under experimentation and some of the agencies have submitted their complete study reports to the Committee and some have not. Since the device has been adopted in California, he suggested that the items related to PCSHs be removed and closed from "Pending Experimentation".

Chairman Fisher agreed with Gerry's comments and asked if there are other comments. There were none.

Motion: Moved by Gerry Meis, seconded by Merry Banks, recommended to close all the items related to the pedestrian countdown signal heads.

Motion Carried 8-0.

Discussion Item:

04-E Combining of the MUTCD 2003 & CA Supplement to a single document

Chairman Fisher asked Johnny Bhullar to share the progress on the combining of the MUTCD 2003 and CA Supplement to a single document.

Johnny provided a few handout samples to Committee members on the combined single-document version of Part 6 and Part 7 of the MUTCD 2003 and the California Supplement for review and comments. Due to the large size of the document, it was not included in the agenda packet. Johnny added that the combined version is the reflection of the May 20, 2004 adoption of California Supplement along with MUTCD 2003. He did not make any changes, even to the miss spelling.

Chairman Fisher suggested having a workshop to discuss the format and any other issues.

Johnny agreed to have a workshop and added that he will have the draft version of the complete document for members for review and comments. Johnny further added that he would like get comments on the Part 6 & 7 by the end of next week, these comments will assist to work on the rest of the document.

Committee members agreed to provide comments on Part 6 & 7.

Action: The workshop to discuss combined version of the MUTCD 2003 and California Supplement will be held on June 9, 2005 in Sacramento.

04-G Overhead Pedestrian/School Crosswalk Signing with Yellow Flashing Beacons

Chairman Fisher asked Jacob Babico to address overhead pedestrian/school crosswalk signing with flashing yellow beacons.

Jacob stated that the overhead assembly for school crosswalk with yellow flashing beacons required a downward arrow on the mast arm mounting. He added that Johnny Bhullar is in agreement with that because there is need for clarity. He requested that the item be placed under the action items during the next CTCDC meeting with proposed changes.

Chairman Fisher added that the revised language also includes the option to having two downward 45 degree arrows on both sides of the sign. This will provide the option to use a single downward arrow or two pointing outward arrows (45 degree) at both sides of the sign.

Action: Item will be placed on the agenda under “public hearings”.

05-2 MUTCD Section 1A.03 Discussion on option which allows agencies to develop word message sign with out experimentation

Chairman Fisher asked Gerry Meis to address discussion item MUTCD Section 1A.03. Gerry invited Johnny Bhullar.

Johnny stated that CA Supplement has adopted the MUTCD Section 1A.03 and this section allows agencies to develop any word messages signs without a need for experimentation. Color, shape and symbols require FHWA approval for experimentation. The FHWA gives an option for word message signs, does the State want to restrict this option? In other words, can agencies create their own word message signs without any approval or standardization by the CTCDC or they should seek approval from the CTCDC?

Gerry Meis stated that by adopting MUTCD Section 1A.03 along with California Supplement, it creates conflict with the California Vehicle Code (CVC) Section 21400. The CVC 21400 states:

Uniform Standards

21400. The Department of Transportation shall, after consultation with local agencies and public hearings, adopt rules and regulations prescribing uniform standards and specifications for all official traffic control devices placed pursuant to this code, including, but not limited to, stop signs, yield right-of-way signs, speed restriction signs, railroad warning approach signs, street name signs, lines and markings on the roadway, and stock crossing signs placed pursuant to Section 21364.

The Department of Transportation shall, after notice and public hearing, determine and publicize the specifications for uniform types of warning signs, lights, and devices to be placed upon a highway by any person engaged in performing work which interferes with or endangers the safe movement of traffic upon that highway.

Only those signs, lights, and devices as are provided for in this section shall be placed upon a highway to warn traffic of work which is being performed on the highway.

Any control devices or markings installed upon traffic barriers on or after January 1, 1984, shall conform to the uniform standards and specifications required by this section.

Gerry added that the adoption of Section 1A.03 would create inconsistency and motorists will see different sign with the same message. This will create confusion to the travelling public. To keep uniformity and consistency, California must amend this section. He suggested to place this item under the “public hearing” for the next meeting.

Hamid Bahadori agreed with Gerry’s comments.

Action: The item will be placed on the agenda under “public hearing”.

05-3 Parking Restrictions at Intersections, CA Supplement Section 3B.18

Chairman Fisher asked Gerry Meis to address agenda item 05-3, parking restrictions at intersections.

Gerry stated that the Traffic Manual had conflict between two sections that were both related to the Parking restrictions at intersections. The sections were as follows:

Chapter 6, Section 6-02.13 Parking Stall Markings

Fourth paragraph of this section state: All intersection, one stall length on each side measured from the crosswalk or end of curb return should have parking prohibited.

Chapter 8, Section 8.02-2 Policy on Parking Restrictions

Item C, fourth paragraph states: All intersections, one stall length on each side from the crosswalk or end or curb return shall have parking prohibited.

During the adoption of California Supplement along with the MUTCD 2003, Section 8.02-2 of the Traffic Manual was adopted into the CA Supplement as Section 3B.18. The City of San Francisco has written a letter and requested that this issue be discussed among the Committee members. The City of San Francisco believes that the “shall” conditions place an unreasonable liability and financial burden on all California agencies. Compliance with these requirements will result in the loss of a great number of parking spaces, a particular concern for dense urbanized areas. The City requested that this entire section be revised to match the language changing “shall” to “should” conditions. Gerry suggested to placing this item on the agenda under “public hearing”.

Jacob Babico agreed with Gerry comments and suggestion.

Action: Committee agreed to place this item on agenda under “public hearing”.

Information Items

05-4 Older California Traffic Safety Task Force Proposal to Amend MUTCD Sections 3D.03, 6F.58 through 6F.61, 6F.63, 6F.65, 6F.81, 6F.85, 6G.15 and 6G.16 and Notes to TA's 39, 40, 41 and 45.

Johnny informed the Committee members that item 05-4 will be an action item for the next meeting and background information has been provided in the agenda packet from pages 42 through 53.

Next Meeting: The next meeting will be held on July 28, 2005 at 1120 N Street (Auditorium), Sacramento, CA 95814.

Adjourn: The meeting was adjourned at 3:30 PM. Motion moved by Gerry Meis and seconded by Farhad Mansourian. Motion carried 8-0.